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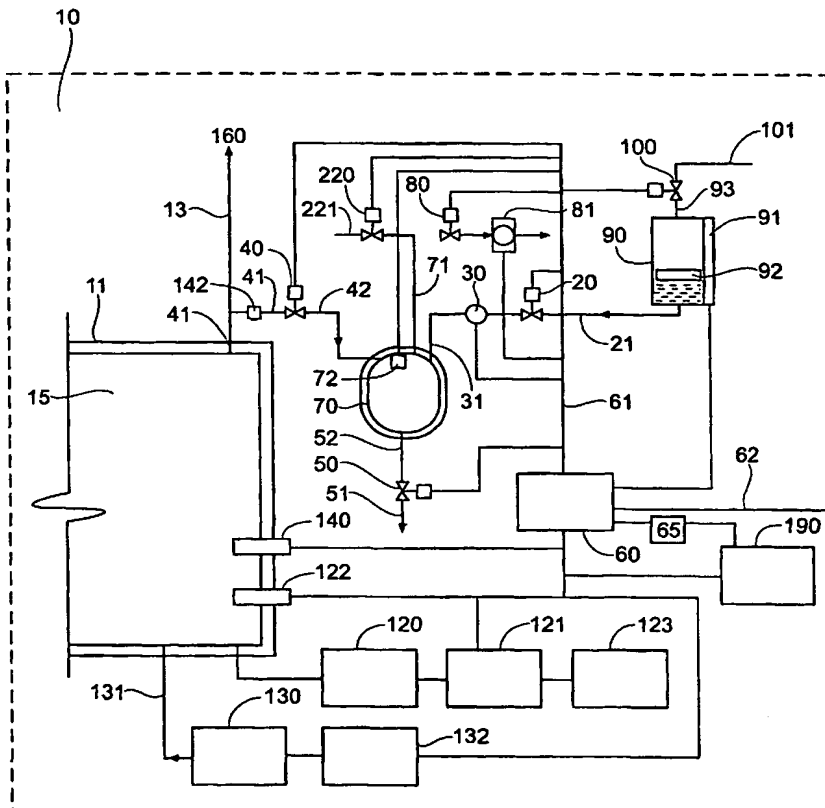
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(54) Title: SYSTEMS AND METHODS FOR CONTROLLING HEAT TREATING ATMOSPHERES AND PROCESSES BASED UPON MEASUREMENT OF AMMONIA CONCENTRATION



(57) Abstract: Systems and methods for determining an ammonia content of an ammonia-based atmosphere. The systems and methods provide a measurement vessel (70). The systems and methods provide an ammonia-based atmosphere conveyed into the measurement vessel (70). The systems and methods provide water conveyed into the measurement vessel (70), with the water causing dissociation of the ammonia from the atmosphere within the measurement vessel (70). The systems and methods measure a flow rate of water into the measurement vessel (70) during the dissociation. The systems and methods determine the ammonia content in the atmosphere based, at least in part, upon the flow rate of water.



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